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(54) **DIELECTROPHORESIS DEVICE AND METHOD HAVING NON-UNIFORM ARRAYS FOR MANIPULATING PARTICLES**

(76) Inventors: **Eric B. Cummings**, 1159 Rebecca Dr., Livermore, CA (US) 94550; **Yolanda Fintschenko**, 819 Marceila St., Livermore, CA (US) 94550; **Blake Simmons**, 432 Bartlett St., San Francisco, CA (US) 94110

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 626 days.

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204/600; 209/127.1

(58) **Field of Classification Search** 204/547,
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See application file for complete search history.

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Primary Examiner—Nam Nguyen
Assistant Examiner—Surekha Vathyam

(57) **ABSTRACT**

Microfluidic devices according to embodiments of the present invention include an inlet port, an outlet port, and a channel or chamber having a non-uniform array of insulating features on one or more surfaces. Electrodes are provided for generation of a spatially non-uniform electric field across the array. A voltage source, which may be an A.C. and/or a D.C. voltage source may be coupled to the electrodes for the generation of the electric field.

1 Claim, 4 Drawing Sheets

